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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,254	06/11/2001	Robert Huusken	ZOU-6	2975

6

7590 08/26/2003

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EXAMINER
RIBAR, TRAVIS B

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/878,254	Applicant(s) HUUSKEN, ROBERT	
	Examin r Travis B Ribar	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachm nt(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The examiner maintains the rejections of claims 3, 4, and 16-20 made under this heading in the office action dated March 21, 2003, which are repeated below for the applicant's convenience.

3. The examiner withdraws the rejection of claim 11 made under this heading in the office action dated March 21, 2003.

4. Claims 3, 4, and 16-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The polyurethane (PU) polymers in claims 3, 4, and 16 are not adequately described in the specification. Claims 3, 4, and 16 encompass wide ranges of polyurethane compositions and since the applicant does not give specific examples of either the reactants used to make the claimed PU or chemical examples of the final product PU, one skilled in the art would not be able to make the invention the applicant claims.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. The applicant's amendment filed June 24, 2003 overcomes all rejections put forth under this heading in the office action dated March 21, 2003.

7. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the examiner is unsure how the entire coating (resin?) may comprise only from about 1 to about 3 (meth)acryloyloxy groups. The examiner is not certain whether this is measured by moles of coating, measured per repeat unit in the resin, or represents another type of structure.

Claim Interpretation

8. Based on the applicant's comments in the paragraph bridging pages 8-9 in their response filed June 24, 2003, the examiner is interpreting claims 21 and 22 to mean that the flame retardant additives are salts of each of the corresponding compounds listed in the claims.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. The examiner maintains the rejections put forth under this heading in the office action dated March 21, 2003, which are repeated below for the applicant's convenience.

11. Claims 1-15 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Bonin ('527) in view of either Valet et al. or Susi and also in view of the applicant's disclosure in the current specification.

The office action dated March 21, 2003 contains the text of this rejection.

Regarding the flame retardant additives of claims 21 and 22, since the applicant teaches that such compositions are known in the art to be suitable flame retardants (page 8 of the specification), it would have been obvious to substitute them for the flame retardant agents in von Bonin ('527). The motivation would be that the substitution of one known flame retardant agent for another would be expected to yield similar results. Therefore this combination of references also meets claims 21 and 22.

12. Claims 16 and 18-20 rejected under 35 U.S.C. 103(a) as being unpatentable over von Bonin ('527) in view of either Valet et al. or Susi and also in view of the applicant's disclosure in the current specification, as applied to claim 1 above, and further in view of WO 96/07678.

The combination of von Bonin ('527), Valet et al., Susi, and the applicant's admitted prior art is discussed above, but does not include the applicant's claimed polyurethane compositions.

WO 96/07678 is disclosed on page 3 of the applicant's specification as teaching a flame-retardant polyurethane composition that has good storage stability and meets the chemical structure limitations of claims 16 and 18-19. The examiner feels that it also may meet the limitations of claim 20, but is not sure due to the aforementioned issue of indefiniteness.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the polyurethane composition in WO 96/07678 as the polyurethane in von Bonin ('527). The motivation for doing so would be to improve the flame resistance and storage stability of the resin composition. Therefore it would have been obvious to combine WO 96/07678 with von Bonin ('527), Valet et al., Susi, and the applicant's admitted prior art to obtain the invention as specified in claims 16 and 18-20.

13. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Bonin ('527) in view of either Valet et al. or Susi and also in view of the applicant's disclosure in the current specification as applied to claim 1 above, and further in view of Kawakami et al.

The combination of von Bonin ('527), Valet et al., Susi, and the applicant's admitted prior art is discussed above, but does not include the applicant's claimed polyurethane compositions.

Kawakami et al. teaches a polyurethane composition that meets the structural limitations of claims 16-20 (see the abstract). The resulting polyurethane has good scratch resistance. At the time of the invention, it would have been obvious to a person

of ordinary skill in the art to use the polyurethane composition in Kawakami et al. as the polyurethane in von Bonin ('527). The motivation for doing so would be to provide the resin composition in von Bonin ('527) with good scratch resistance properties, beneficial because the resin forms a coating on a substrate. Therefore it would have been obvious to combine Kawakami et al. with von Bonin ('527) in view of either Valet et al. or Susi and also in view of the applicant's disclosure in the current specification to obtain the invention as specified in claims 16-20.

Response to Arguments

14. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is found in the secondary references, which show that the coatings therein provide protection for a substrate layer.

15. The applicant also argues that Valet et al. and Susi are not applicable because they do not disclose a flame-retardant substrate. This is not persuasive because the examiner relied upon von Bonin ('527) to disclose such a substrate.

16. In response to applicant's argument that von Bonin ('527) and Valet et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, von Bonin discloses a substrate and Valet et al. discloses a coating for a substrate that affords protection against light-induced degradation—two fields in which the applicant is concerned. The combination of these references is maintained.

17. Regarding the applicant's argument that von Bonin ('527) does not anticipate the current application because it is drawn to foams, the examiner notes that foams are not outside the range of the current claim limitations and that von Bonin ('527) also teaches materials that are not foams (column 7, lines 1-2).

18. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

19. The applicant's argument that the flame-retarding agents in claims 6-12 are not disclosed by the specification is not persuasive. The applicant specifies that commercially available flame-retardant agents were used in the invention (page 8 of the specification), indicating that such agents were known in the art to be flame-retarders. The examiner therefore maintains this aspect of the invention.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis B Ribar whose telephone number is (703) 305-3140. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Travis B Ribar
Examiner
Art Unit 1711

TBR

James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700